

# **National Wetlands Mitigation Action Plan**

## ***December 24, 2002***

The Bush Administration affirms its commitment to the goal of no net loss of the Nation's wetlands. The Administration is hopeful of achieving that goal and in the near future to begin increasing the overall functions and values of our wetlands through the combined efforts of the numerous governmental programs and initiatives, including the Clean Water Act, and non-regulatory wetland conservation initiatives and partnerships among federal agencies, state, tribal and local governments, and the private and not-for-profit sectors. The primary purpose of this Action Plan is to further achievement of the goal of no net loss by undertaking a series of actions to improve the ecological performance and results of wetlands compensatory mitigation under the Clean Water Act and related programs. The actions, listed below and outlined in more detail in the attached Action Plan, will help ensure effective restoration and protection of the functions and values of our Nation's wetlands, consistent with the goals of our clean water laws. The themes guiding these actions include:

- ◆ working in consultation with the Tribes, States, and interested parties to provide a consistent voice on compensatory mitigation matters;
- ◆ focusing our guidance, research, and resources to advance ecologically meaningful compensatory mitigation, informed by science;
- ◆ emphasizing accountability, monitoring, and follow-through in evaluating compensatory mitigation;
- ◆ applying the same compensatory mitigation provisions to Federal projects and on Federal lands as we do to private parties, consistent with existing laws and policies;
- ◆ providing information and options to those who need to mitigate for losses of wetlands functions; and
- ◆ providing technical and research assistance to those who undertake the work of mitigation.

An interagency team will guide the development and implementation of the following action items. Recognizing that advances in science and technology will continue to improve our ability to protect and restore the Nation's aquatic resources, some of the following action items may be modified by the team consistent with our evolving understanding of effective wetlands management.

### **Clarifying Recent Mitigation Guidance**

- ◆ The Army Corps of Engineers (Corps), in consultation with the Environmental Protection Agency (EPA), the Department of Agriculture (USDA), the Department of the Interior (DOI), the Federal Highway Administration (FHWA), and the National Oceanic Atmospheric Administration (NOAA), has re-evaluated its mitigation Regulatory Guidance Letter and is reissuing it to improve mitigation implementation provisions.

### **Integrating Compensatory Mitigation into a Watershed Context**

- ◆ The Corps and EPA, in conjunction with USDA, DOI, and NOAA, working with States and Tribes, will co-lead the development of guidance on the use of on-site vs. off-site and in-kind vs. out-of-kind compensatory mitigation by the end of 2003.
- ◆ EPA and the Corps, in conjunction with USDA, DOI, and NOAA, working with States and Tribes, will co-lead the development of guidance on the use of vegetated buffers as a potential component of compensatory mitigation by 2004.
- ◆ The Corps and EPA, in conjunction with USDA, DOI, and NOAA, working with States and Tribes, will develop guidance on the appropriate use of preservation for compensatory mitigation by 2004.
- ◆ Building on the guidance above, EPA and the Corps, working with USDA, DOI, and NOAA, will co-lead an analysis with Tribes and States on the use of compensatory mitigation within a watershed context and identify criteria for making compensatory mitigation decisions in this context by 2005.

### **Improving Compensatory Mitigation Accountability**

- ◆ EPA, the Corps, and the FHWA will develop guidance that clarifies implementation of the TEA-21 preference for mitigation banking in 2003.
- ◆ EPA will continue to provide financial assistance through its wetlands State grants program to encourage Tribes, States, and others to increase the success of mitigation in their jurisdictions.

- ◆ EPA and the Corps, in conjunction with USDA, DOI, and NOAA, will develop guidance by 2004 for protecting those wetlands for which mitigation, restoration, or creation is not feasible or scientifically viable.
- ◆ EPA and the Corps, in conjunction with USDA, DOI, and NOAA, will clarify considerations for mitigating impacts to streams in the Section 404 program in 2003.

#### **Clarifying Performance Standards**

- ◆ The Corps, EPA, USDA, DOI, and NOAA, working with States and Tribes, will develop a model mitigation plan checklist for permit applicants in 2003.
- ◆ EPA and the Corps, in conjunction with USDA, DOI, and NOAA, will review and develop guidance adapting the National Academies of Sciences' National Research Council-recommended guidelines for creating or restoring self-sustaining wetlands to the Section 404 program in 2003.
- ◆ EPA will analyze existing research to determine the effectiveness of using biological indicators and functional assessments for evaluating mitigation performance in 2003.
- ◆ Building upon the biological indicators and functional assessments research, EPA, in conjunction with the Corps, USDA, DOI, and NOAA, and working with States and Tribes, will lead the development of performance standards guidance on monitoring and adaptive management of mitigation sites by 2005.
- ◆ EPA and the Corps, in conjunction with USDA, DOI, and NOAA, will clarify key concepts related to performance standards.

#### **Improving Data Collection and Availability**

- ◆ The Corps, EPA, USDA, DOI, and NOAA, in conjunction with States and Tribes, will compile and disseminate information regarding existing mitigation-tracking database systems in 2003.
- ◆ Building upon the analysis of existing mitigation data base systems, the Corps, EPA, USDA, DOI, and NOAA will establish a shared mitigation data base by 2005.

- ◆ Utilizing the shared data base, the Corps, in conjunction with EPA, USDA, DOI, and NOAA, will provide an annual public report card on compensatory mitigation to complement reporting of other wetlands programs by 2005.

The signatories or their designated representatives shall meet annually to review the progress being made regarding the implementation of the Action Plan. EPA and the Corps may invite other relevant federal agencies to participate in one or more of the action items.

This plan may be modified as necessary, by mutual written agreement of all the parties.

The participating agencies intend to fully carry out the terms of this agreement. All provisions in this agreement, however, are subject to available resources and authorities of the respective agencies under Section 404 of the Clean Water Act.

/Signed/\_\_\_\_\_ 12/24/02  
Les Brownlee  
Acting Assistant Secretary for Civil Works  
Department of the Army (Civil Works)

/Signed/\_\_\_\_\_ 12/24/02  
G. Tracy Mehan, III  
Assistant Administrator for Water  
U.S. Environmental Protection Agency

/Signed—Scott B.Gudes/\_\_\_\_\_ 12/24/02  
/for/ Vice Admiral Conrad C. Lautenbacher, Jr.  
U.S. Navy (ret.)  
Undersecretary of Commerce for Oceans and Atmosphere  
U.S. Department of Commerce

/Signed/\_\_\_\_\_ 12/24/02  
Lynn Scarlett  
Assistant Secretary of Policy, Management, and Budget  
Department of Interior

/Signed/\_\_\_\_12/24/02

Mark E. Rey

Under Secretary for Natural Resources and the Environment  
U.S. Department of Agriculture

/Signed—George E. Schoener/12/24/02

/for/ Emil H. Frankel

Assistant Secretary for Transportation Policy  
U.S. Department of Transportation

## **ACTION PLAN**

### Introduction

Several recent independent analyses and public commentaries have provided a critical evaluation of the effectiveness of compensatory mitigation for authorized losses of wetlands and other waters of the United States under Section 404 of the Clean Water Act. These analyses and commentaries highlighted a number of shortfalls and identified a variety of technical, programmatic, and policy recommendations for the Federal agencies, States, and other involved parties.

In particular, the agencies are mindful of the comprehensive evaluation of wetlands compensatory mitigation completed by the National Academies of Sciences' National Research Council (NAS) last year. This report, in addition to the General Accounting Office (GAO) report on in-lieu-fee mitigation and others recently completed, provided the basis for a broad, independently facilitated stakeholder gathering in October 2001, during which the agencies gathered feedback from those with an interest in the future of compensatory mitigation, including representatives from academia, States, mitigation bankers, in-lieu-fee mitigation providers, environmental organizations, home builders, and industry. We recognize that success in our ultimate goal is dependent on effective interactions with these stakeholders as we proceed.

### Background

The Bush Administration affirms its commitment to the goal of no net loss of the Nation's wetlands. The Administration is hopeful of achieving that goal and in the near future to begin increasing the overall functions and values of our wetlands through the combined efforts of the numerous governmental programs and initiatives, including the Clean Water Act, and non-regulatory wetland conservation initiatives and partnerships among Federal agencies, state, tribal and local governments, and the private and not-for-profit sectors. A fundamental objective of the Clean Water Act Section 404 program is that authorized losses of wetlands and other waters are offset by restored, enhanced, or created wetlands and other waters that replace those lost acres and functions and values.

Importantly, the regulatory program provides first that all appropriate and practicable steps be taken to avoid impacts to wetlands and other waters, and then that remaining impacts be minimized, before determining necessary compensatory mitigation to offset remaining impacts. This mitigation sequence parallels that which is embodied in the National Environmental Policy Act governing the review of other Federal actions as well. Compliance with these mitigation sequencing requirements is an essential environmental safeguard to ensure that Clean

Water Act objectives for the protection of the Nation's remaining wetlands are achieved.

Federal guidance on compensatory mitigation has been provided in several interagency documents, including the 1990 Memorandum of Agreement between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation under the Clean Water Act Section 404(b)(1) Guidelines (MOA). In 1995, EPA and the Department of the Army were joined by the Departments of the Interior, Commerce, and Agriculture in developing the Federal Guidance on the Establishment, Use and Operation of Mitigation Banks (Banking Guidance). In 2000, the multi-agency Federal Guidance on the Use of In-Lieu-Fee Arrangements for Compensatory Mitigation under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act (In-Lieu-Fee Guidance) was issued. These interagency efforts have helped clarify compensatory mitigation objectives, endorse entrepreneurial mechanisms to achieve mitigation goals, and guide permit applicants in developing environmentally sound and enforceable mitigation projects. It is in light of this background that the agencies outline the following specific actions to improve wetlands compensatory mitigation under the Clean Water Act and related programs.

#### **Clarifying Recent Mitigation Guidance**

**The Corps, in consultation with EPA, USDA, DOI, FHWA, and NOAA, has re-evaluated its mitigation Regulatory Guidance Letter and is reissuing it to clarify mitigation implementation provisions.** The GAO noted that in some circumstances where mitigation involved third-party providers that were not mitigation bankers or in-lieu-fee providers, permits did not clearly state who was responsible for the success of the compensatory mitigation. Consistent with previous joint guidance and independent recommendations, the Corps will reissue the mitigation Regulatory Guidance Letter to clearly identify the party responsible for the ecological performance and results of the compensatory mitigation, the level of documentation necessary by applicants and mitigation providers, and other relevant implementation issues to ensure that mitigation is properly completed.

#### **Integrating Compensatory Mitigation into a Watershed Context**

**The Corps and EPA, in conjunction with USDA, DOI, and NOAA, working with States and Tribes, will co-lead the development of guidance on the use of on-site vs. off-site and in-kind vs. out-of-kind compensatory mitigation by the end of 2003.**

Existing guidance provides that "compensatory actions...should be undertaken, when practicable, in areas adjacent or



contiguous to the discharge site (on-site compensatory mitigation)” and that “generally, in-kind compensatory mitigation is preferable to out-of-kind.” Existing guidance provides flexibility, however, by allowing the use of off-site mitigation where it is determined to be practicable and environmentally preferable to on-site mitigation and allows use of out-of-kind mitigation in circumstances where it is environmentally desirable, in the context of consolidated mitigation. To ensure effective and consistent use of off-site and out-of-kind compensatory mitigation, the agencies will clarify, and if necessary, expand upon, existing guidance. This effort will build on existing language developed for the 1990 MOA, Federal Banking Guidance, In-Lieu-Fee Guidance, and Mitigation RGL and provide examples illustrating when it may be appropriate to use off-site and/or out-of-kind mitigation in lieu of on-site and/or in-kind mitigation.

**EPA and the Corps, in conjunction with USDA, DOI, and NOAA, working with States and Tribes, will co-lead the development of guidance on the use of vegetated buffers as a potential component of compensatory mitigation by 2004.** Lands bordering open waters (e.g., rivers, lakes, estuaries) play important roles including but not limited to maintaining water quality, providing habitat for fish and wildlife, and providing flood storage benefits. To date, limited guidance has been provided to agency field staff on the appropriate use of vegetated buffers as a component of an overall compensatory mitigation plan. To ensure appropriate and consistent use of vegetated buffers, the agencies will provide guidance to clarify the use of vegetated buffers as mitigation in the Section 404 program. This effort will utilize performance goals/standards in recommending vegetated buffers and include examples of methodologies for determining mitigation credit for vegetated buffers. This effort will draw upon buffer information compiled for the non-point/agricultural water programs and existing wetlands/forestry best management practices.

**The Corps and EPA, in conjunction with USDA, DOI, and NOAA, working with States and Tribes, will develop guidance on the appropriate use of preservation for compensatory mitigation by 2004.** Typically, the preservation of existing aquatic resources has been accepted as compensatory mitigation only in exceptional circumstances. To ensure the appropriate and consistent use of preservation as compensatory mitigation, the agencies will develop specific guidance that will clarify the exceptional circumstances described in current guidance in which preservation may serve as an effective and environmentally appropriate approach to satisfy compensatory mitigation requirements. This effort will build on existing language developed for the 1990 MOA and Federal Banking Guidance and provide examples of acceptable preservation

projects.

**Building on the guidance above, EPA and the Corps, working with USDA, DOI, and NOAA, will co-lead an analysis with Tribes and States on the use of compensatory mitigation within a watershed context and identify criteria for making compensatory mitigation decisions in this context by 2005.** As a general matter, compensatory mitigation decisions are made on a case-by-case basis and often do not consider the proper placement of mitigation projects within the landscape context, the ecological needs of the watershed, and the cumulative effects of past impacts. The Federal agencies will analyze the issues associated with better use of compensatory mitigation within a watershed context, with assistance from the States and agencies. Following this analysis, the agencies will develop guidance to encourage placement of mitigation where it would have the greatest benefit and probability for long-term sustainability. The guidance will help decision-makers utilize the watershed-based planning tools/resources already developed by the agencies as well as state (Basinwide Management Approach), regional (Synoptic Assessment, Southeastern Ecological Framework), and local (watershed plans, land suitability models) watershed planning efforts. This guidance will complement other non-regulatory watershed management initiatives and partnerships.

#### **Improving Compensatory Mitigation Accountability**

**EPA, the Corps, and the FHWA will develop guidance that clarifies implementation of the TEA-21 preference for mitigation banking in 2003.** The statutory preference for mitigation banking in offsetting impacts to aquatic resources and natural habitats from federally-funded highway projects has caused some confusion in circumstances where onsite mitigation opportunities are available. The agencies will clarify how the mitigation banking preference may be used to most effectively mitigate for such projects with linear and scattered impacts to wetlands.

**EPA will continue to provide financial assistance through its wetlands State grants program to encourage Tribes, States, and others to increase the success of mitigation in their jurisdictions.** EPA has identified improving wetlands ecological performance and results of compensatory mitigation as a priority, along with wetlands monitoring and assessment and the protection of vulnerable wetlands and aquatic resources. The Wetland Program Development Grants, administered by EPA, provide recipients an opportunity to conduct projects that promote coordination and accelerate research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent,

prevention, reduction, and elimination of water pollution. Priority is given to proposals that address EPA's priority areas, including improving the effectiveness of compensatory mitigation. EPA will announce a set of Wetland Program Development Grants for projects that support the improvement of mitigation success in achieving wetlands performance and results, in the context of building or enhancing wetlands protection, restoration, or management programs, and will publicize the annual availability of grants for this purpose.

**EPA and the Corps, in conjunction with USDA, DOI, and NOAA, will develop guidance by 2004 for protecting those wetlands for which mitigation, restoration, or creation is not feasible or scientifically viable.** As concluded by the NAS, there are a number of aquatic resource systems for which successful re-creation or restoration has not been effectively demonstrated and therefore avoidance of impacts to these resources was strongly recommended. Certain aquatic resource types require a specific combination of plant types, soil characteristics, and water supply that are currently difficult to create. To ensure that we meet our Clean Water Act goals, the agencies will provide guidance emphasizing the protection of the Nation's wetlands resources that are difficult to restore.

**EPA and the Corps, in conjunction with USDA, DOI, and NOAA, will clarify considerations for mitigating impacts to streams in the Section 404 program in 2003.** Historically, impacts to stream systems such as filling, impoundment, and channelization, have been compensated with wetland mitigation. To date, limited guidance has been provided to agency field staff in the appropriate considerations for mitigating impacts to streams. To ensure appropriate and consistent mitigation for impacts to streams, the agencies, working with States, will clarify considerations for mitigating impacts to streams in the Section 404 program. Many agency field offices are independently developing a variety of stream assessment approaches and stream standard operating procedures (e.g., NC, SC, GA, TN, KY, MS, and AL). Also, a number of stream and stream/wetland mitigation banks have been established or are currently under review by agency field offices. These and other ongoing stream restoration training efforts will help inform development of the guidance.

#### **Clarifying Performance Standards**

**The Corps, EPA, USDA, DOI, and NOAA, working with States and Tribes, will develop a model mitigation plan checklist for permit applicants in 2003.** The type of information needed for mitigating impacts to wetlands and other waters is often unclear to permit applicants. Taking advantage of State and Corps District examples, this effort would result in a model compensatory mitigation checklist to facilitate permit applicants providing necessary information early in the permitting process. The checklist would also allow more effective participation during public notice and help minimize delays in the permit decision making process. The checklist could be regionally adapted to respond to specific needs of different areas of the country. A number of mitigation checklists are currently in use by various Districts, States, and Mitigation Bank Review Teams and could be readily

consulted.

**EPA and the Corps, in conjunction with USDA, DOI, and NOAA, will review and develop guidance adapting the NAS-recommended guidelines for creating or restoring self-sustaining wetlands to the Section 404 program in 2003.** The NAS proposed ten operational guidelines that would aid agency personnel and mitigation practitioners in designing projects to become ecologically self-sustaining. As stated by the NAS, to become self-sustaining, aquatic resource mitigation sites must have the proper hydrological processes present and be able to persist over time. The agencies will adapt the NAS guidelines for use in the Section 404 program. The NAS-recommended guidelines could be adapted into a series of questions (e.g., checklist) that could be made available to permit applicants and answered by regulatory staff in consultation with other resource agencies during project review.

**EPA will analyze existing research to determine the effectiveness of using biological indicators and functional assessments for evaluating mitigation performance in 2003.** Independent evaluations of mitigation raised concerns that there was an over-reliance on the use of vegetation to measure wetlands mitigation success. Biological assessments (bio-assessments) are based on the premise that the community of plants and animals living in a wetland will reflect the health of a wetland. Typically, bio-assessments evaluate wetland health and could be used in conjunction with functional assessments, which are primarily designed to inform management decisions regarding proposed impacts to wetlands and restoration of wetlands to compensate for wetland losses. EPA will lead an effort to review potential biological indicators, functional assessments, and other reference site parameters for assessing compensatory mitigation. Literature reviewed by NAS in the completion of its report and work done by the Corps and EPA to develop several assessment methodologies will serve as a starting point.

**Building upon the biological indicators and functional assessments research, EPA, in conjunction with the Corps, USDA, DOI, and NOAA, and working with States and Tribes, will lead the development of performance standards guidance on monitoring and adaptive management of mitigation sites by 2005.** Current guidance does not provide sufficient consistency regarding how to evaluate achievement of wetlands ecological performance and results, nor does current guidance establish appropriate monitoring and adaptive management activities. The GAO recommended that the agencies establish criteria for evaluating performance of mitigation projects and develop and implement procedures for assessing achievement of wetlands ecological performance and results. The NAS concluded that more effective monitoring, as part of adaptive management, as well as compliance evaluations, would increase the performance of

compensatory mitigation sites and allow for adaptive management. EPA will lead the effort to build upon the guidelines for maintaining self-sustaining wetlands, draw upon published approaches to performance standards, and use the results of the biological/functional assessments analysis.

**EPA and the Corps, in conjunction with USDA, DOI, and NOAA, will clarify key concepts related to performance standards.**

### **Improving Data Collection and Availability**

**The Corps, EPA, USDA, DOI, and NOAA, in conjunction with States and Tribes, will compile and disseminate information regarding existing mitigation-tracking data base systems in 2003.** The independent evaluations of mitigation highlighted a need for improved data to track mitigation. While a system currently exists to track acreages of permitted impacts and compensatory mitigation required, the lack of wetlands function information and other parameters hampers efforts to accurately measure achievement of wetlands performance goals and results. The Corps and the other Federal agencies will compile and evaluate the merits of the various mitigation-tracking data base systems in use, including the Corps= RAMS/RAMS2 data base as well as regional data bases established by agency field offices.

**Building upon the analysis of existing mitigation data base systems, the Corps, EPA, USDA, DOI, and NOAA will establish a shared mitigation data base by 2005.** Based on the results of the analysis, the agencies will establish a data base that can be shared with federal and state regulatory and resource agencies and the public. An interagency team is currently working on a pilot internet-based tool to assist in tracking large-scale mitigation projects such as mitigation banks. This tool is being designed to manage and monitor information regarding mitigation bank credit/debit transactions, attainment of performance standards, credit release, and bank documents. The system is being designed to reside on a District=s server and allow different levels of access/input for the public, bank sponsors, Corps staff, and other Mitigation Bank Review Team members.

**Utilizing the shared data base, the Corps, in conjunction with EPA, USDA, DOI, and NOAA, will provide an annual public report card on compensatory mitigation to complement reporting of other wetlands programs by 2005.** The NAS reported that @the goal of no net loss of wetlands is not being met for wetland functions by the mitigation program.@ To ensure that the public is informed about the status of the Administration=s commitment to the no net loss of wetlands goal, the Corps would lead the development of an annual public report card on the

contributions of the Section 404 program to the no net loss of wetlands goal, to complement



reporting of other wetlands programs. Shared databases would allow relatively easy queries regarding credit/debit transactions and the status of restoration/enhancement for mitigation projects and sites.